



PARALLEL MAGNETIC RESONANCE IMAGING  
TECHNIQUES USING RADIOFREQUENCY COIL  
ARRAYS Daniel K. Sodickson  
S.No. 10/771,041 Docket No.: B0662.70055 US00  
REPLACEMENT SHEET

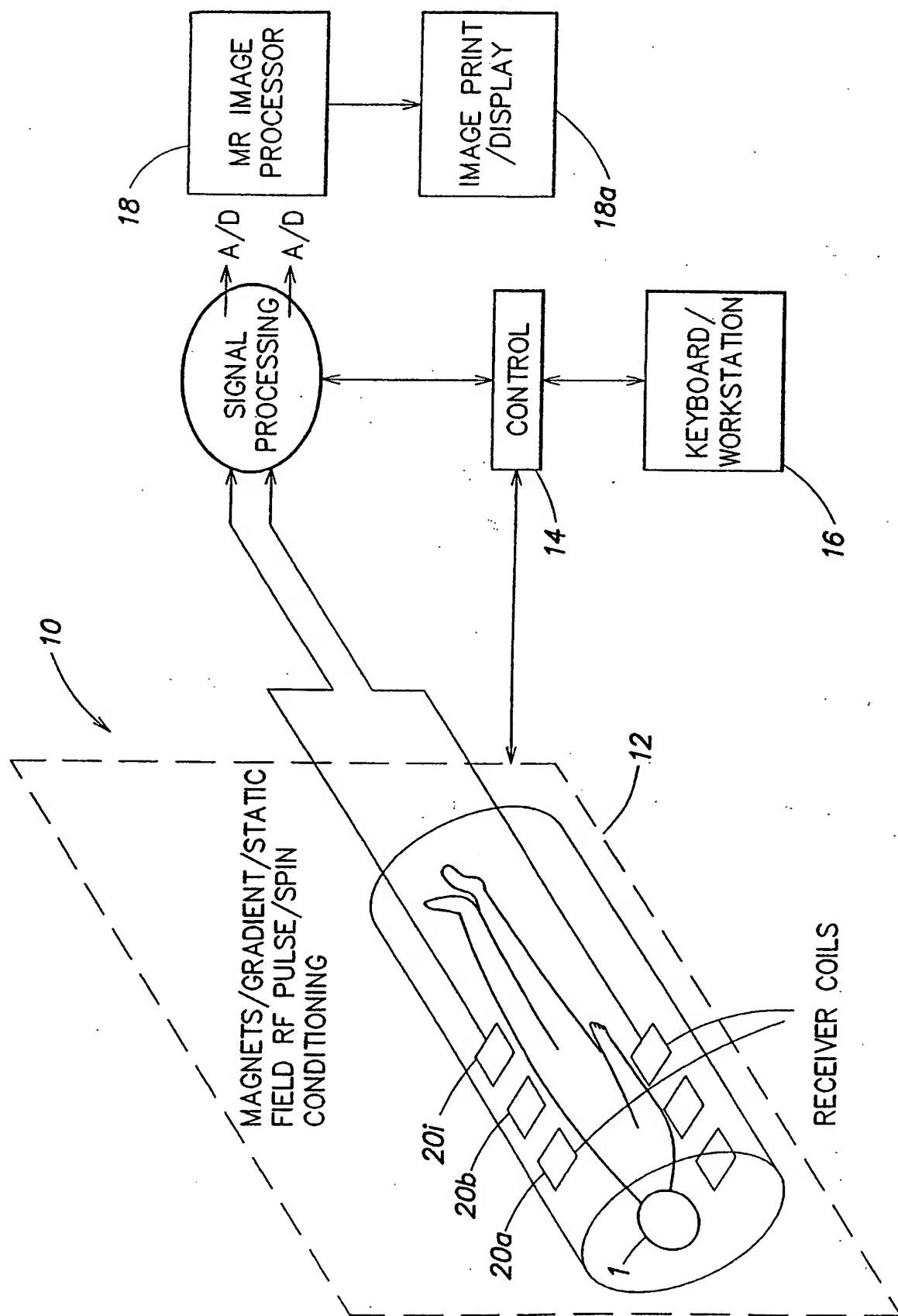
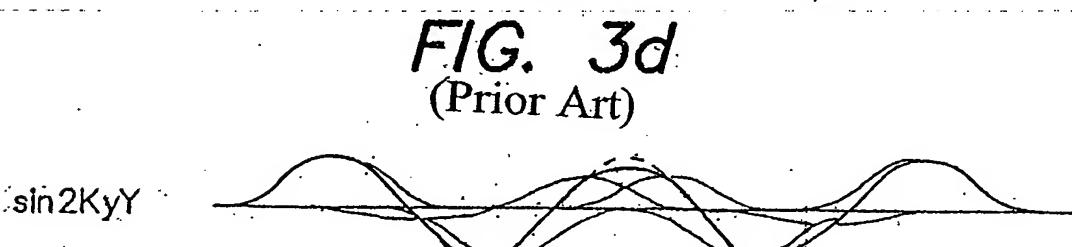
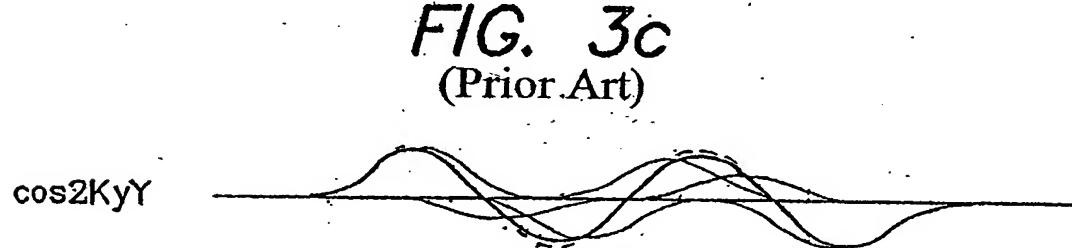
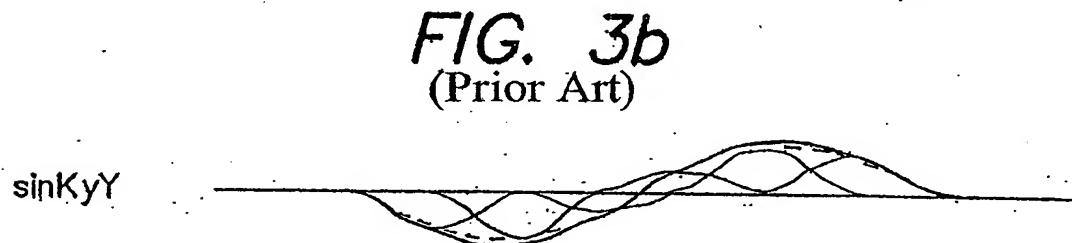
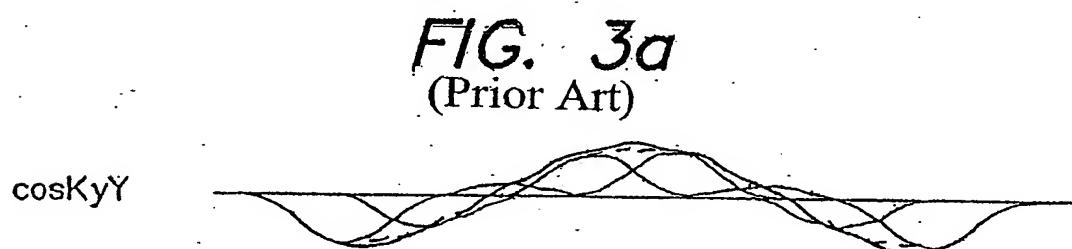
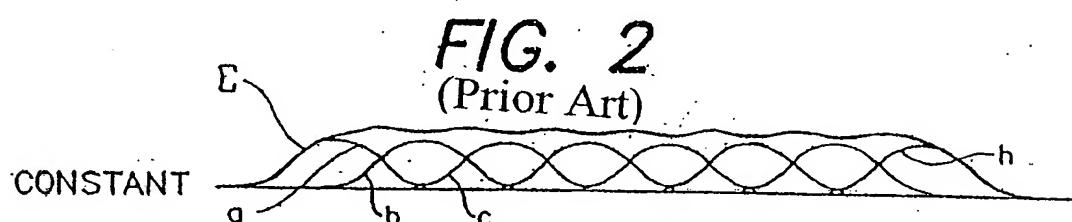
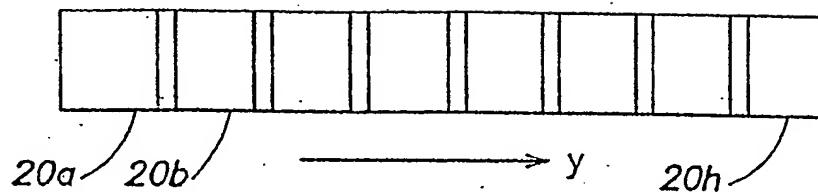


FIG. 1  
(Prior Art)



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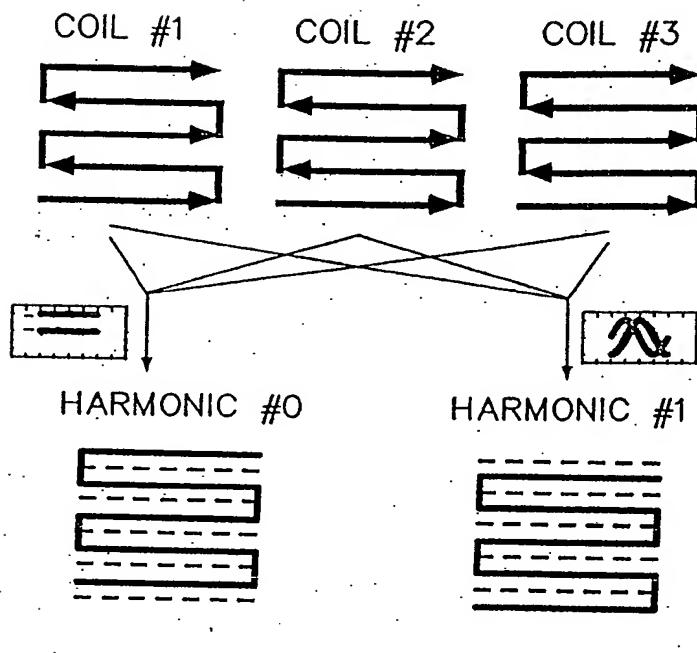


FIG. 4a

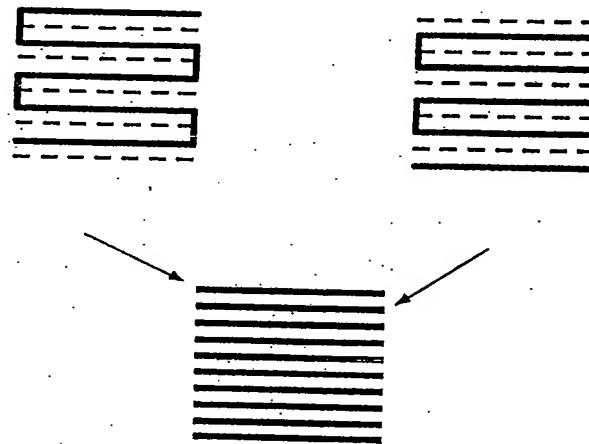


FIG. 4b

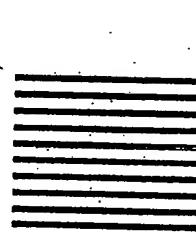
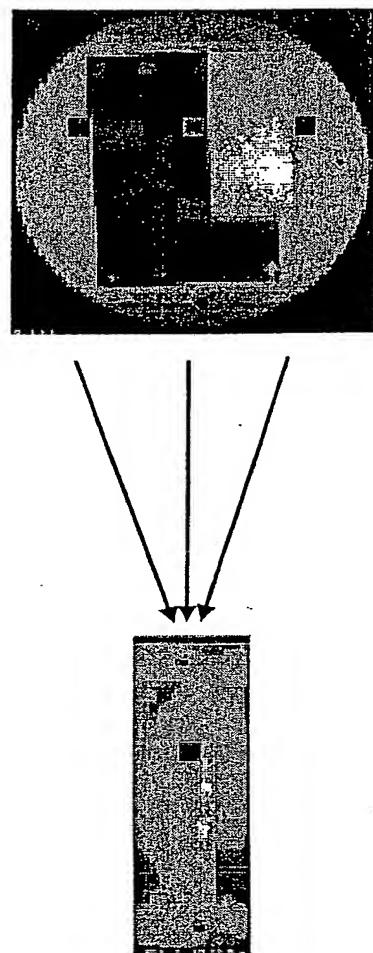


FIG. 4c

PARALLEL MAGNETIC RESONANCE IMAGING  
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S.No. 10/771,041 Docket No.: B0662.70055 US00  
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***FIG. 5***

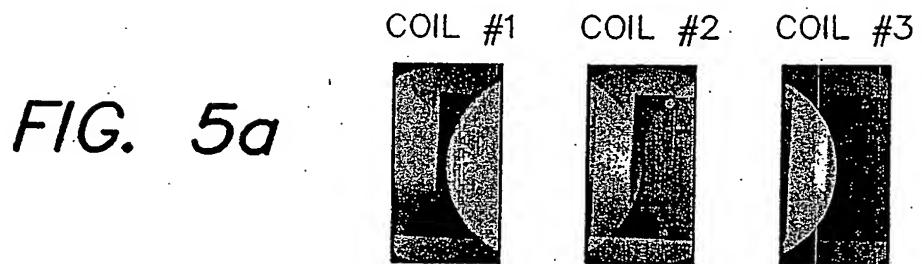


FIG. 5a

HARMONIC #0 HARMONIC #1

FIG. 5b

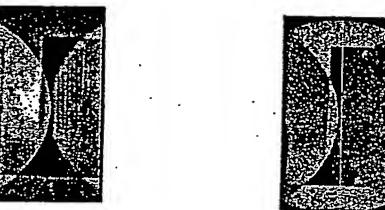
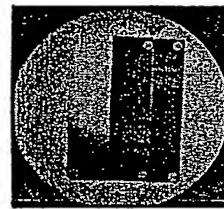
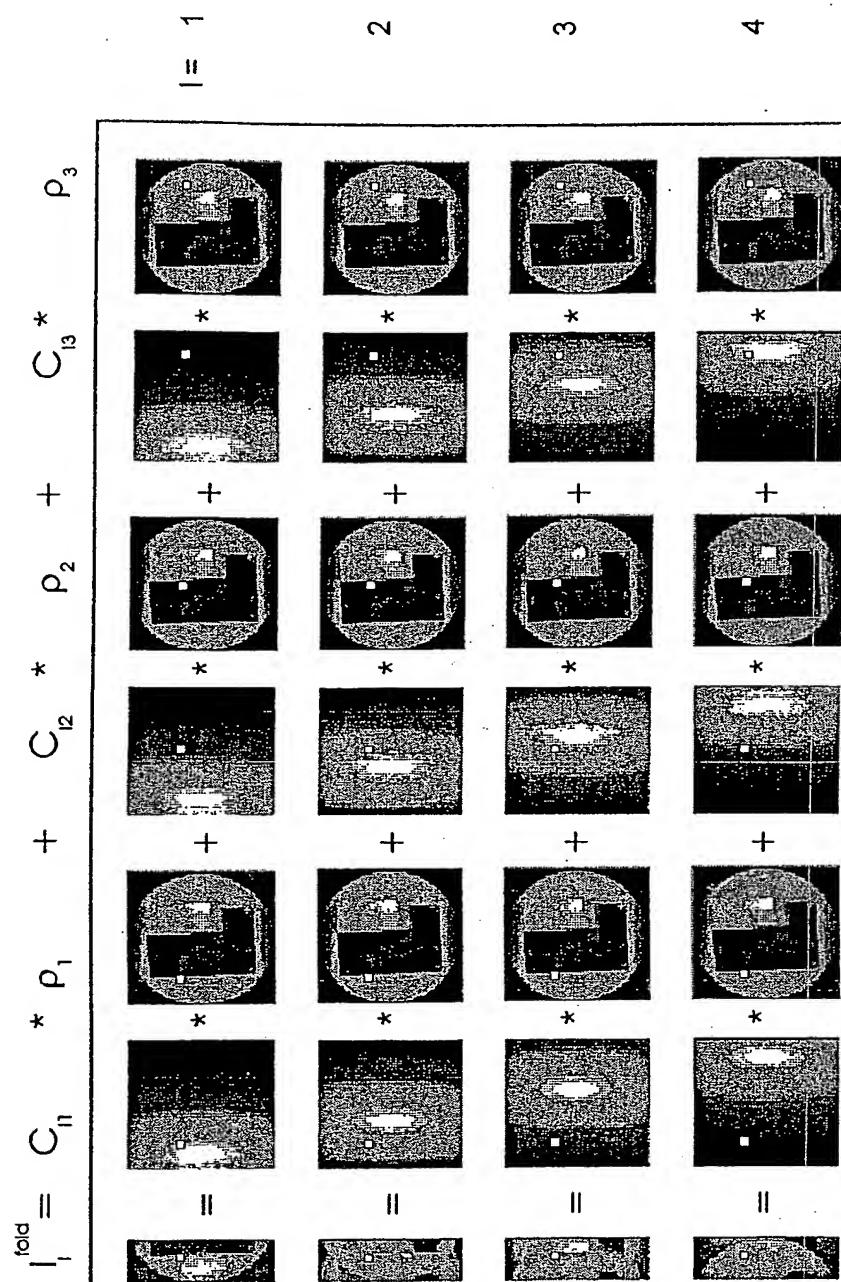


FIG. 5c



PARALLEL MAGNETIC RESONANCE IMAGING  
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*FIG. 6*

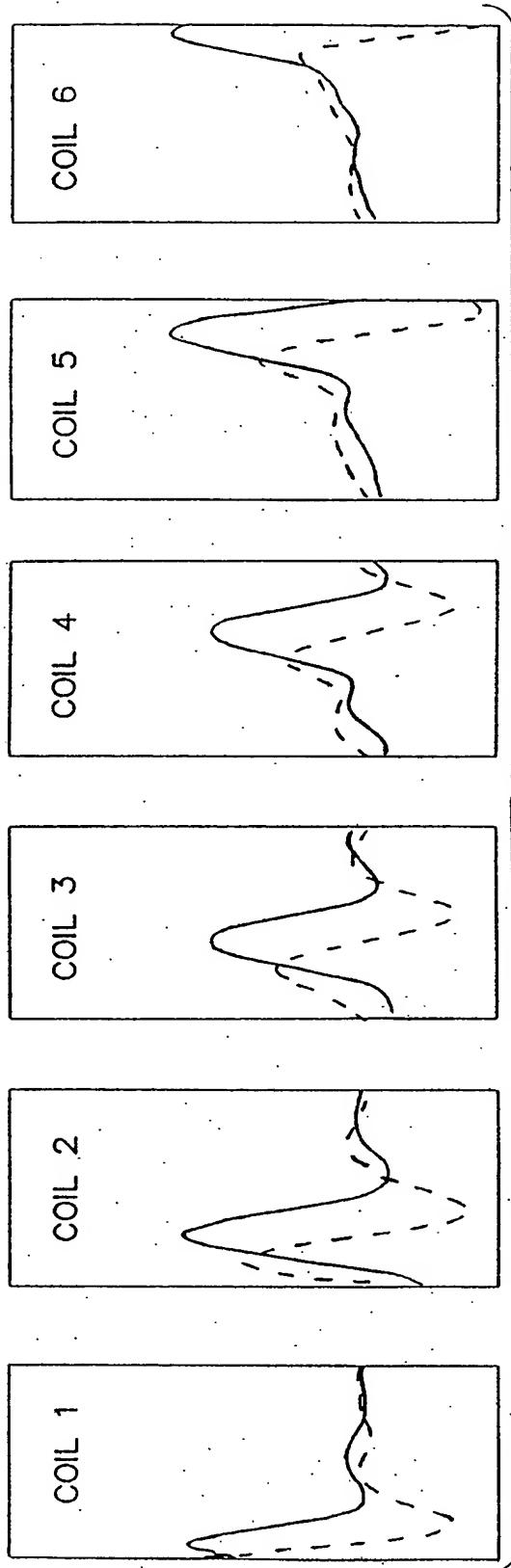


FIG. 7a

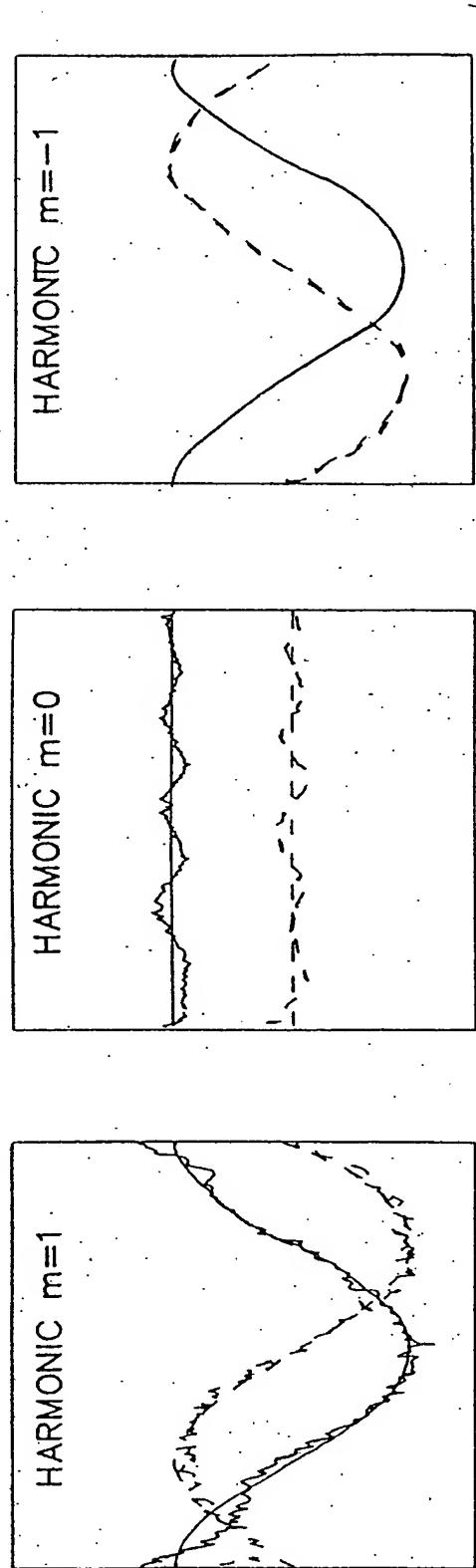


FIG. 7b

PARALLEL MAGNETIC RESONANCE IMAGING  
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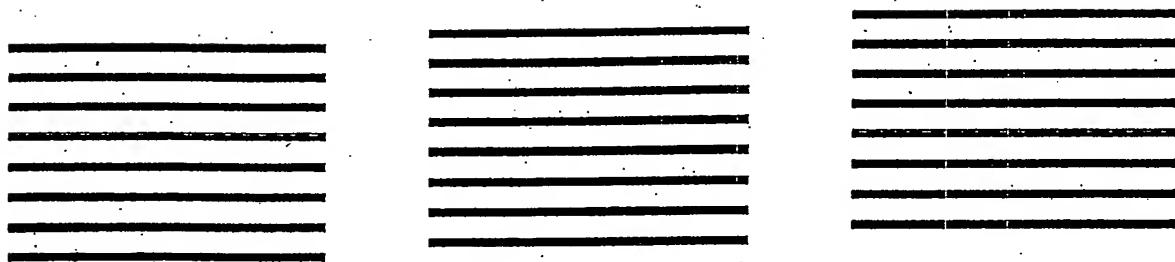
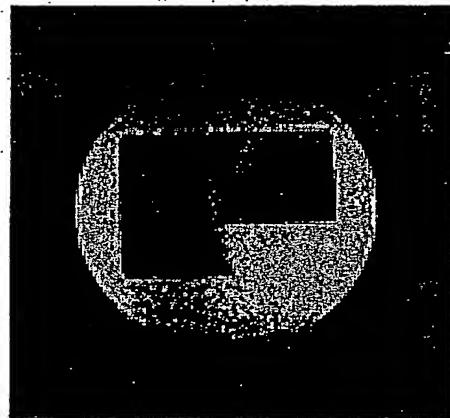


FIG. 7c

$m = (1, 0)$



$m = (1, -0)$

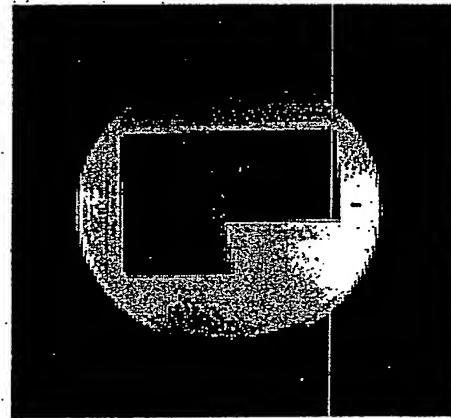


FIG. 7d

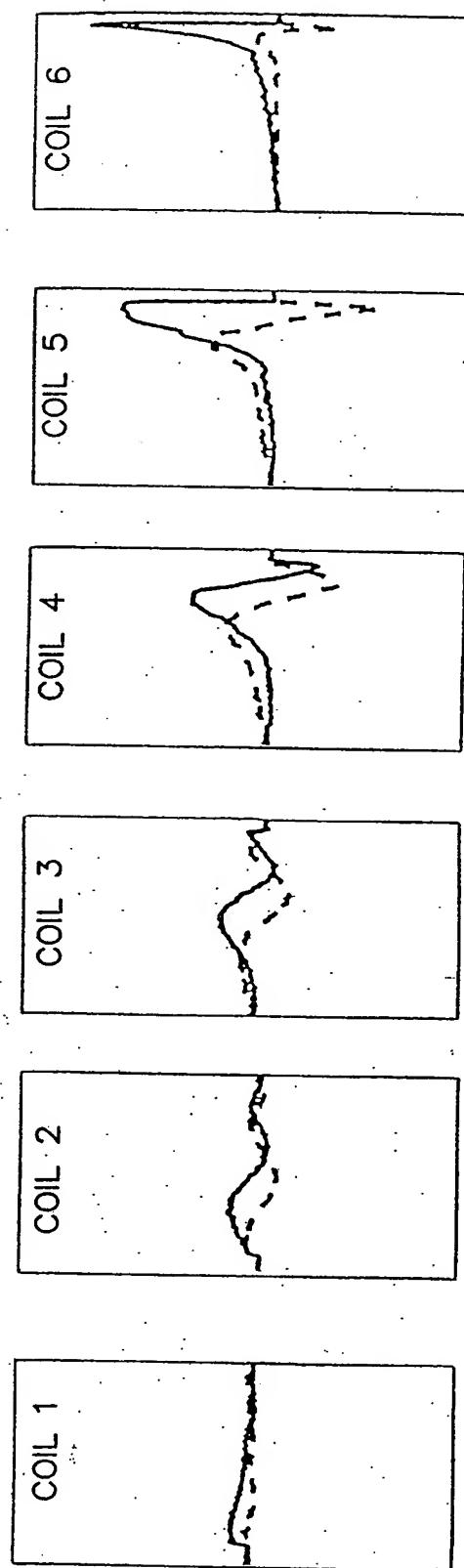


FIG. 8a

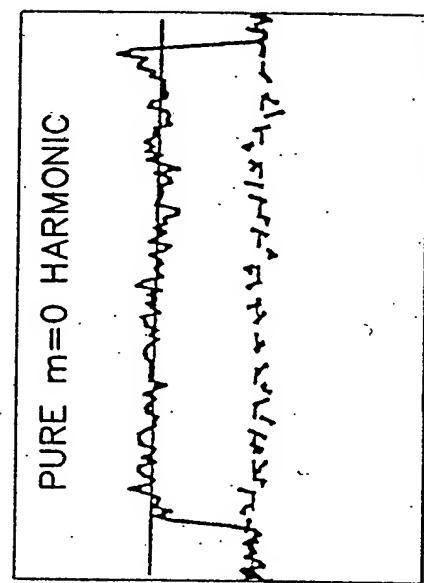
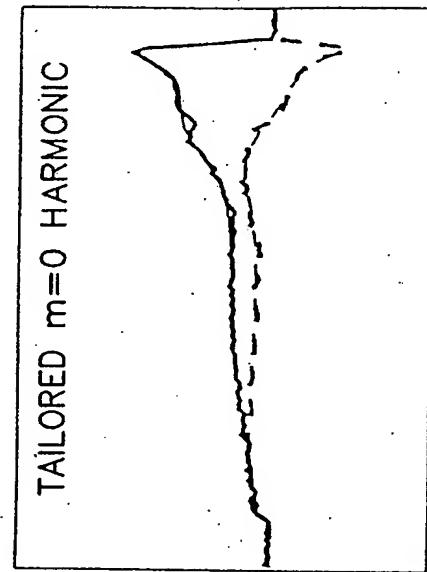
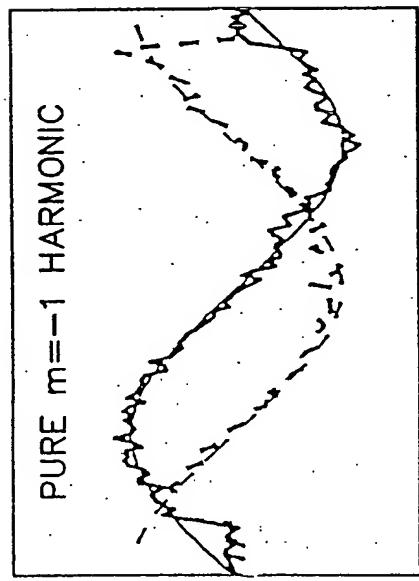
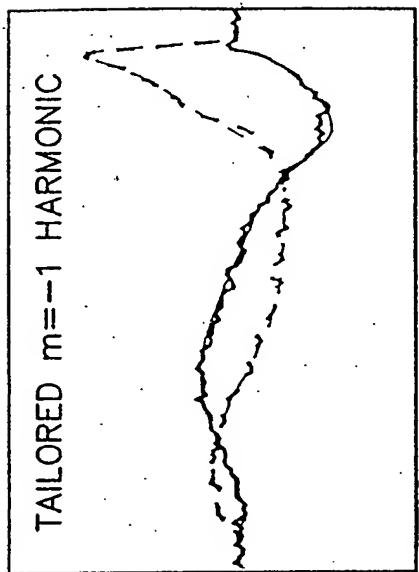


FIG. 8b



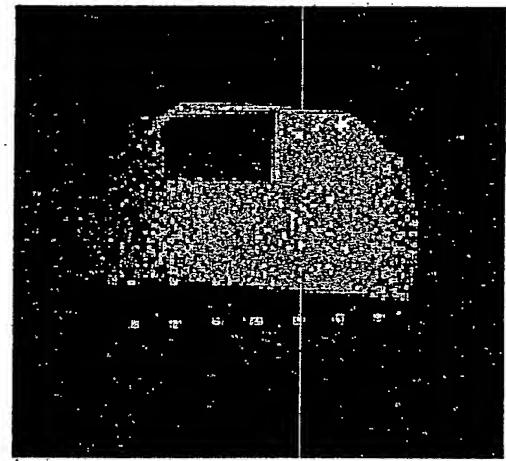
TAILORED  $m=-1$  HARMONIC



PURE  $m = -1$  HARMONIC

FIG. 8c

## PURE $m=(0-1)$ HARMONICS



## TAILORED $m=(0 -1)$ HARMONICS

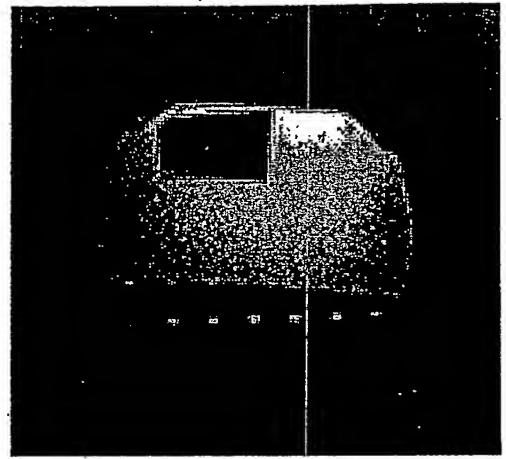


FIG. 8d

PARALLEL MAGNETIC RESONANCE IMAGING  
TECHNIQUES USING RF COIL  
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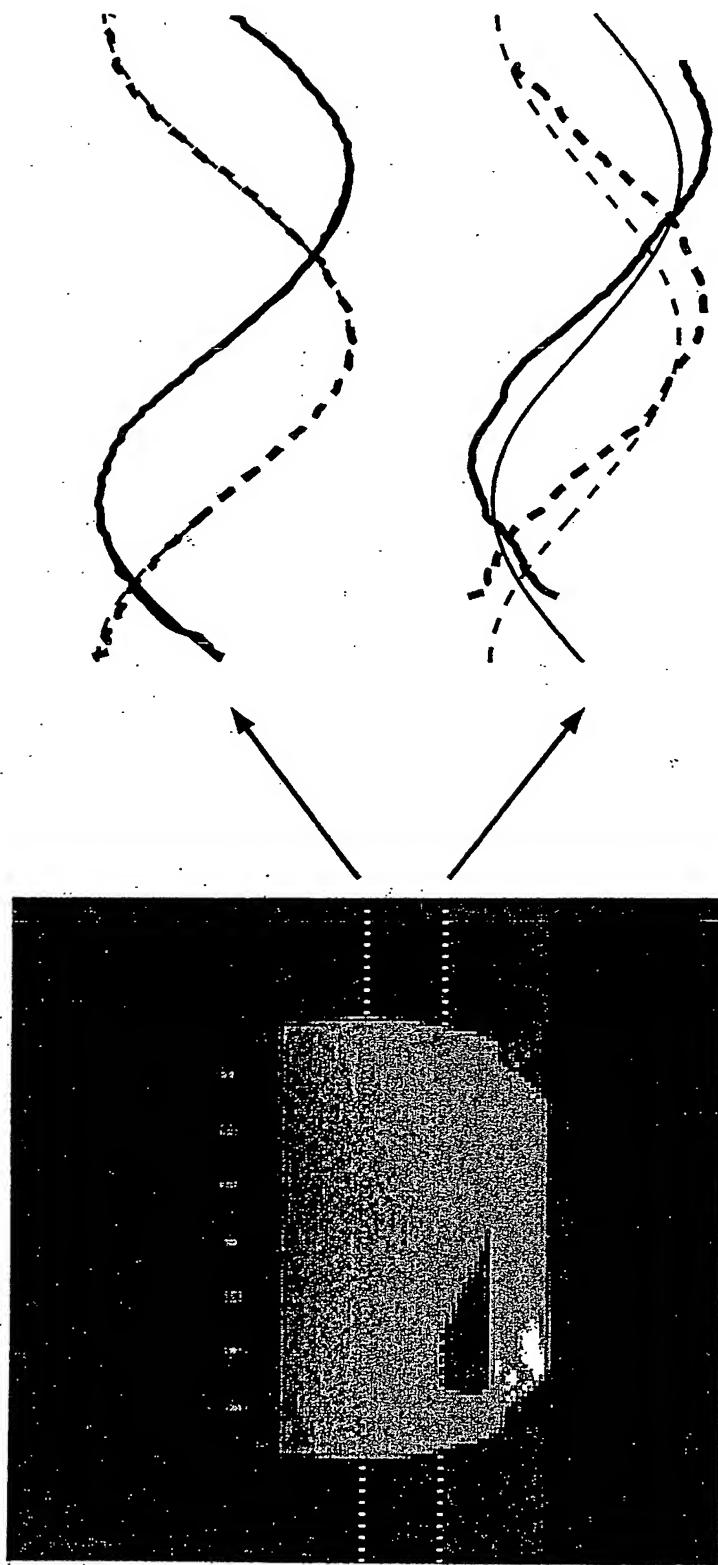


FIG. 9a

PARALLEL MAGNETIC RESONANCE IMAGING  
TECHNIQUES USING RADIOFREQUENCY COIL  
ARRAYS Daniel K. Sodickson  
S.No. 10/771,041 Docket No.: B0662.70055 US00  
REPLACEMENT SHEET

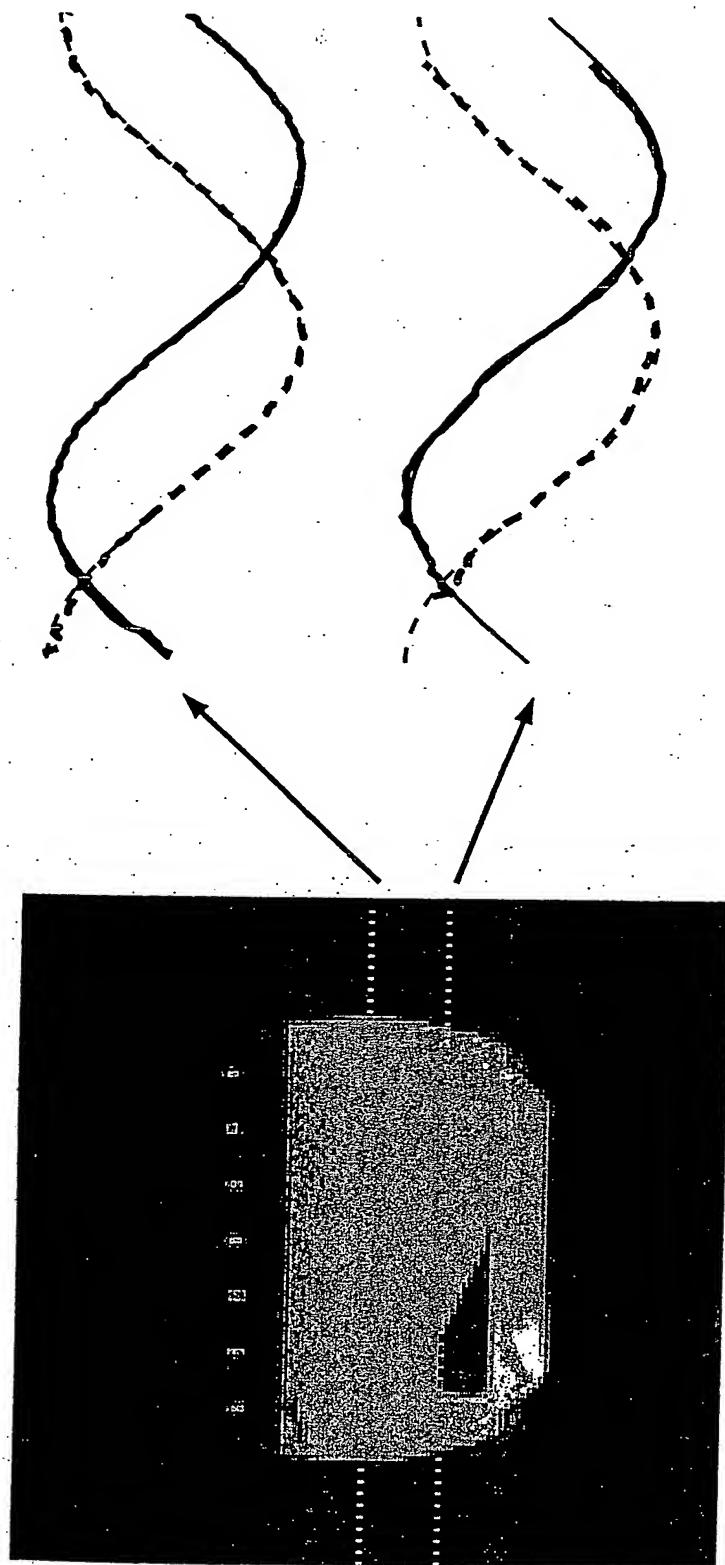


FIG. 9b

PARALLEL MAGNETIC RESONANCE IMAGING  
TECHNIQUES USING RADIOFREQUENCY COIL  
ARRAYS - Daniel K. Sodickson  
S.No. 10/771,041 Docket No.: B0662.70055 US00  
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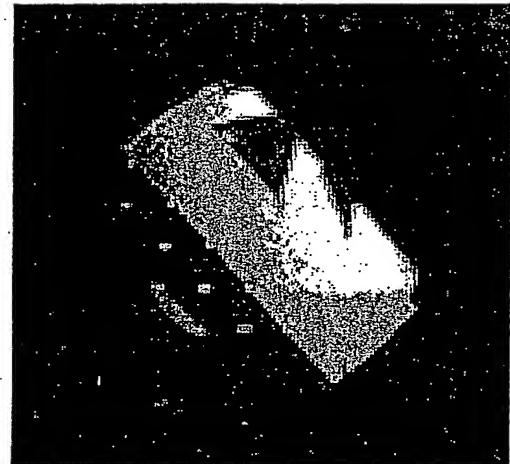


FIG. 10c

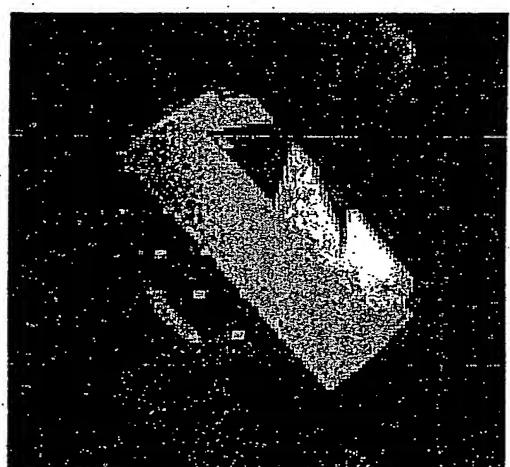


FIG. 10b

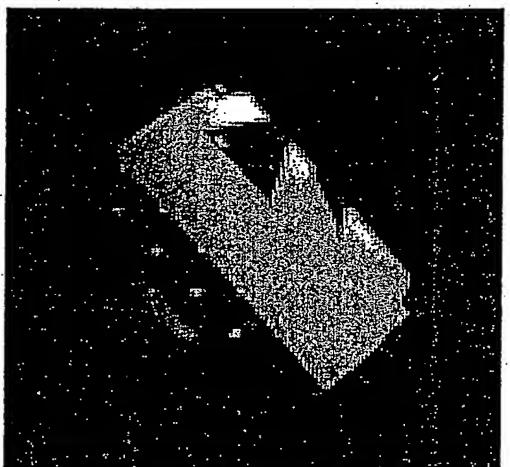


FIG. 10a

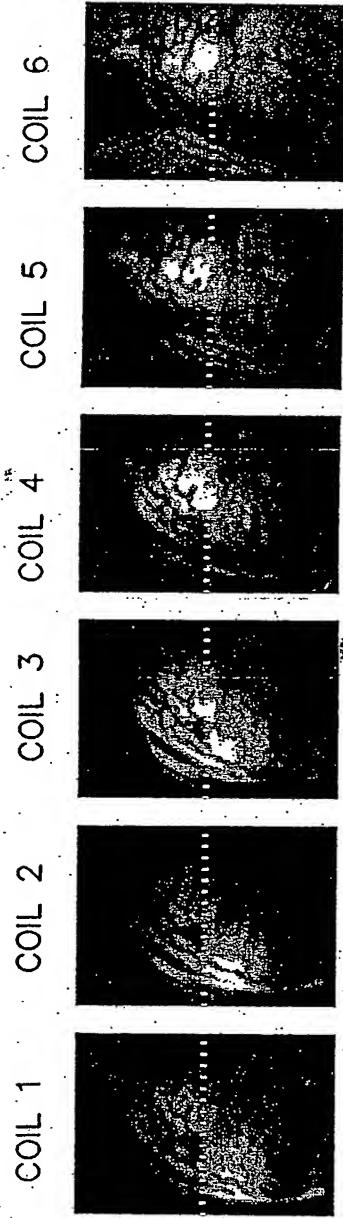


FIG. 11a

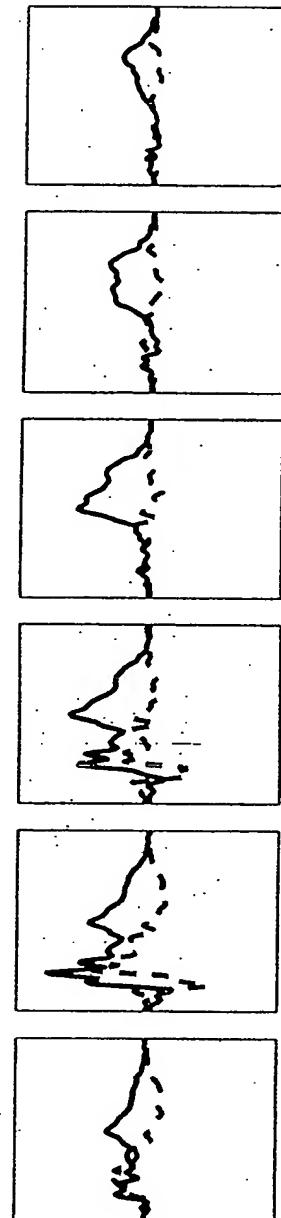


FIG. 11b

PARALLEL MAGNETIC RESONANCE IMAGING  
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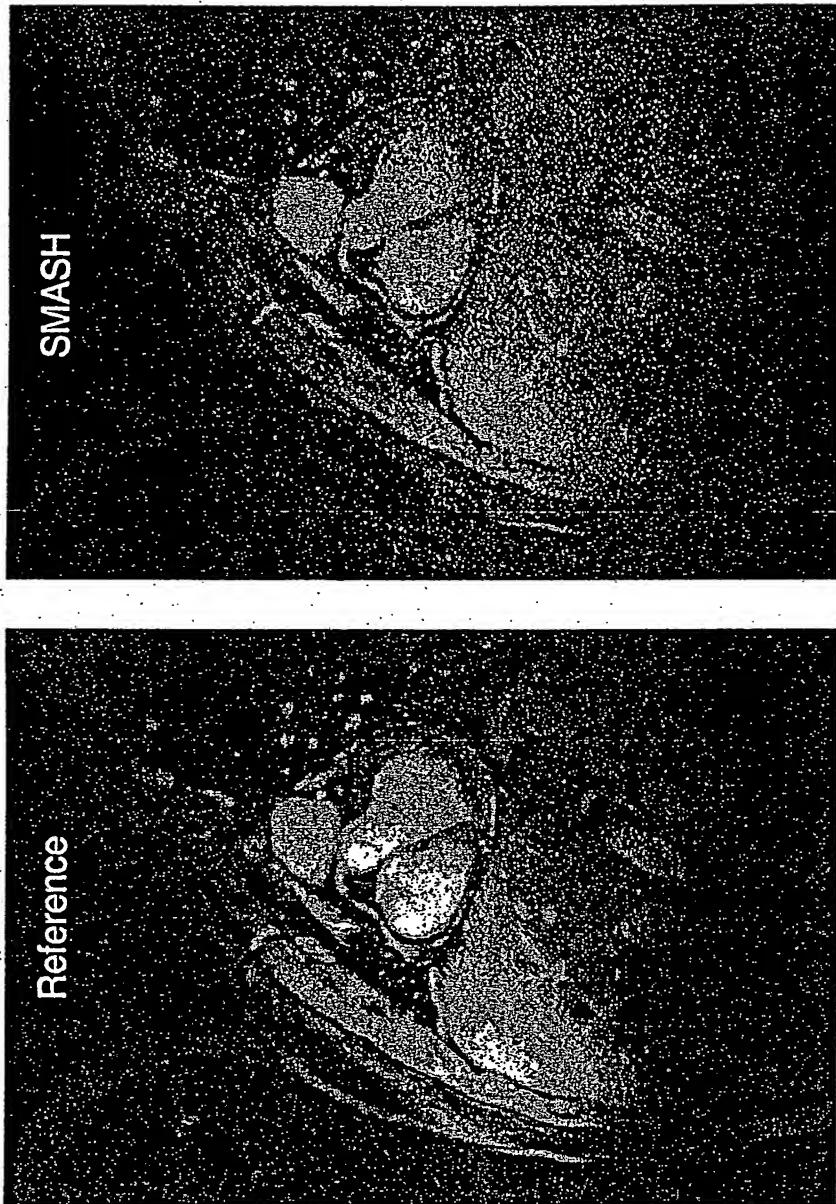


FIG. 11C

SMASH Image



Sensitivity reference



FIG. 12a



FIG. 12b

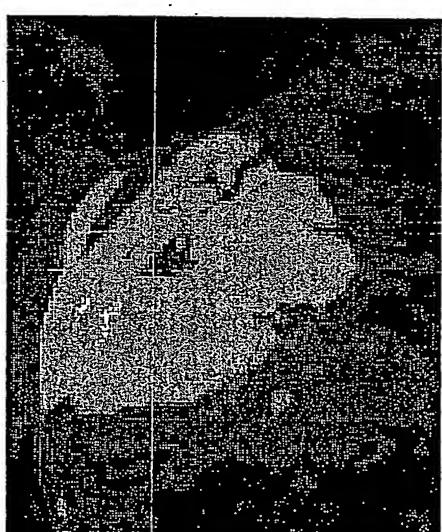


FIG. 12c

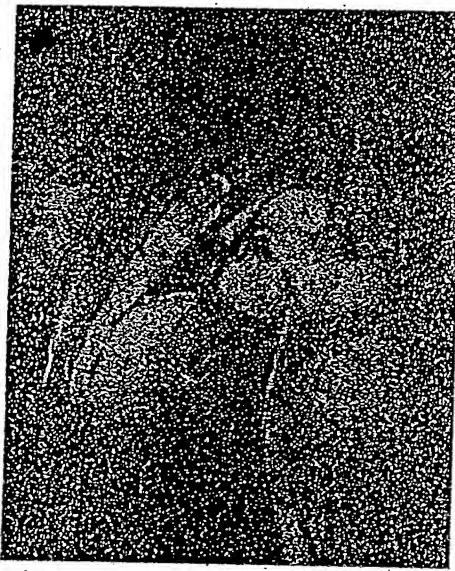


FIG. 13a

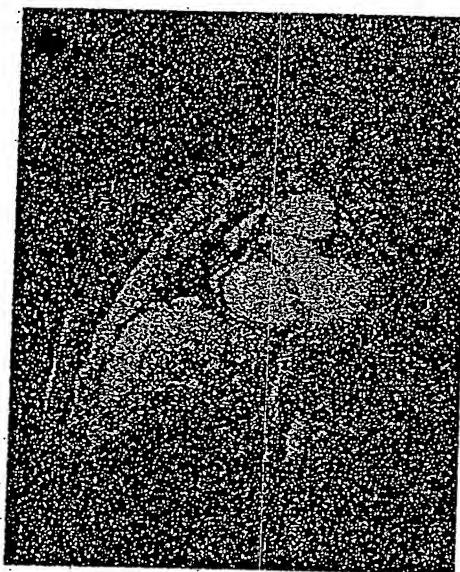


FIG. 13b

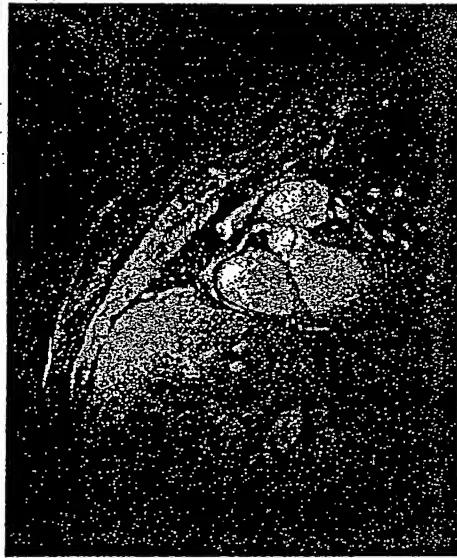


FIG. 13c

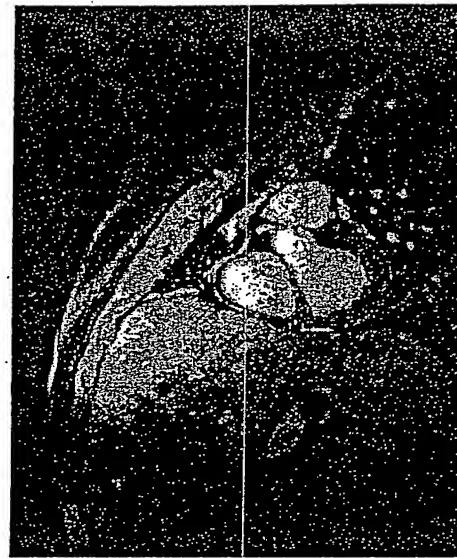


FIG. 13d

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*FIG. 13e*



*FIG. 13f*

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ARRAYS Daniel K. Sodickson  
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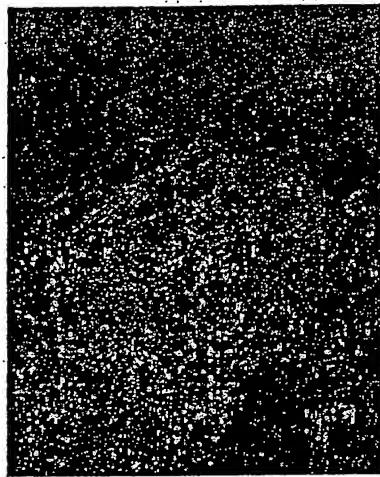


FIG. 14a

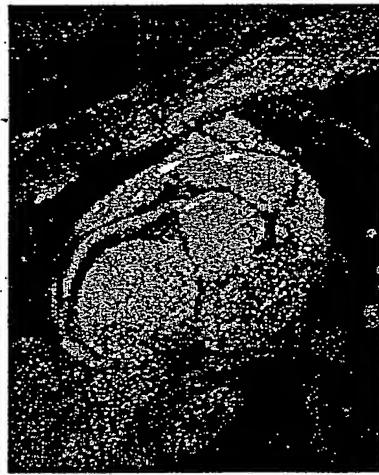
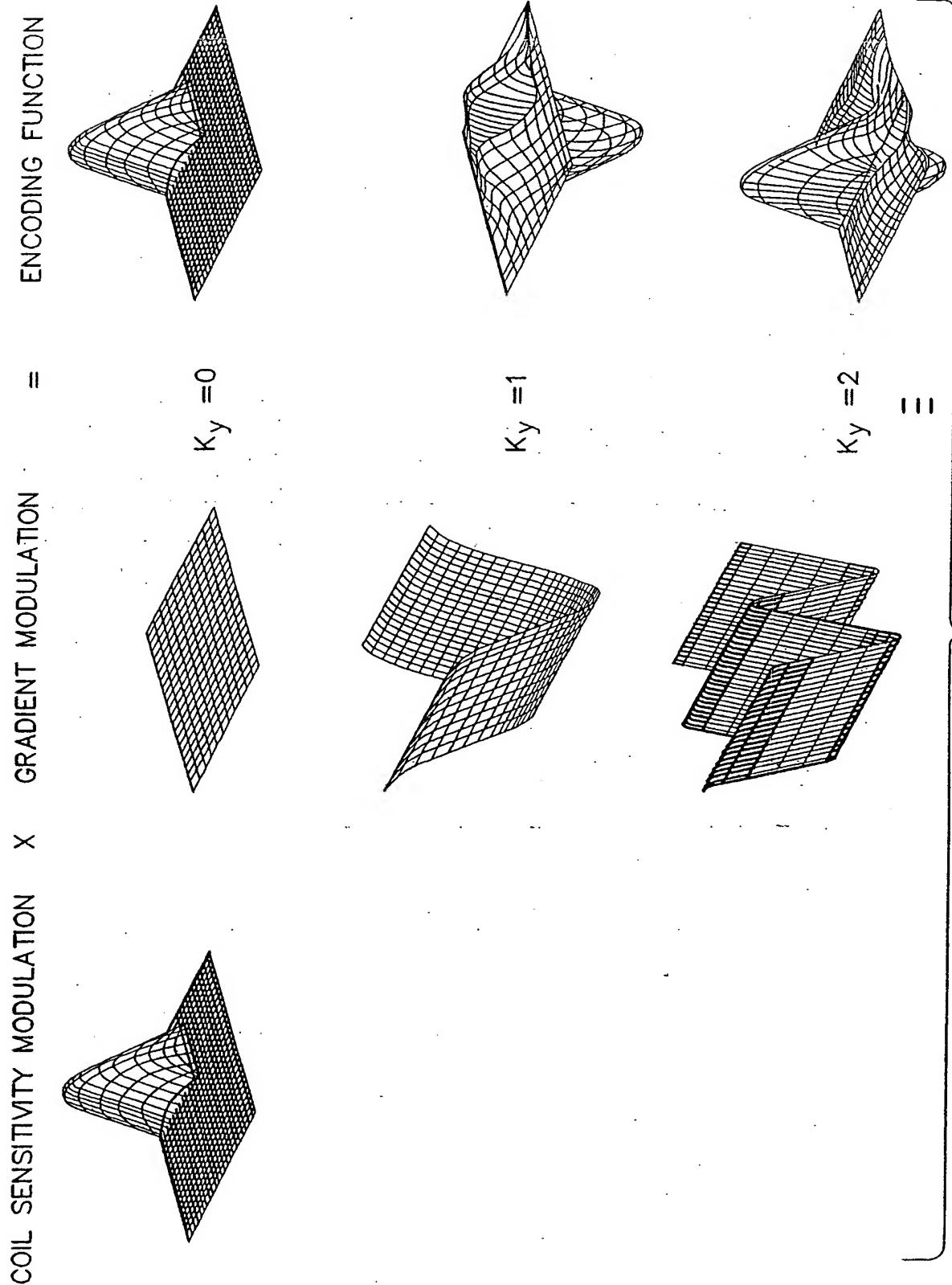


FIG. 14b



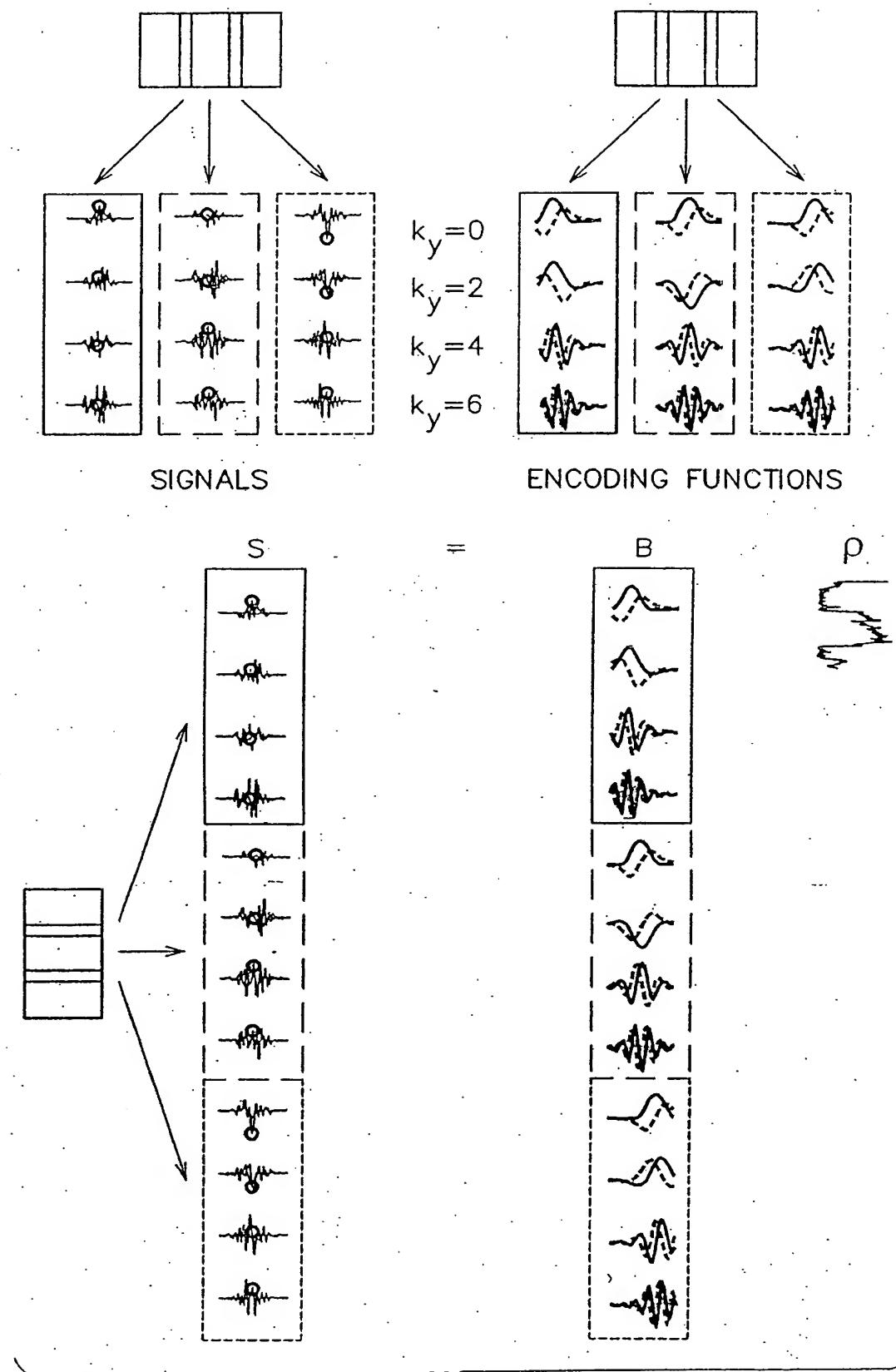


FIG. 16

PARALLEL MAGNETIC RESONANCE IMAGING  
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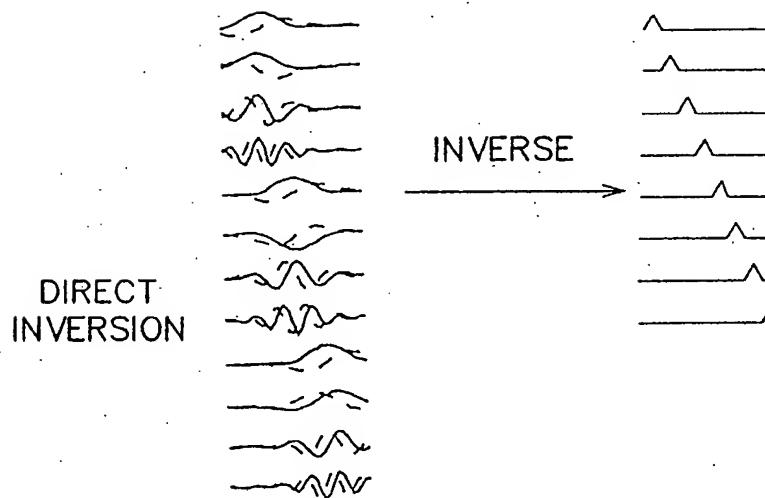


FIG. 17a

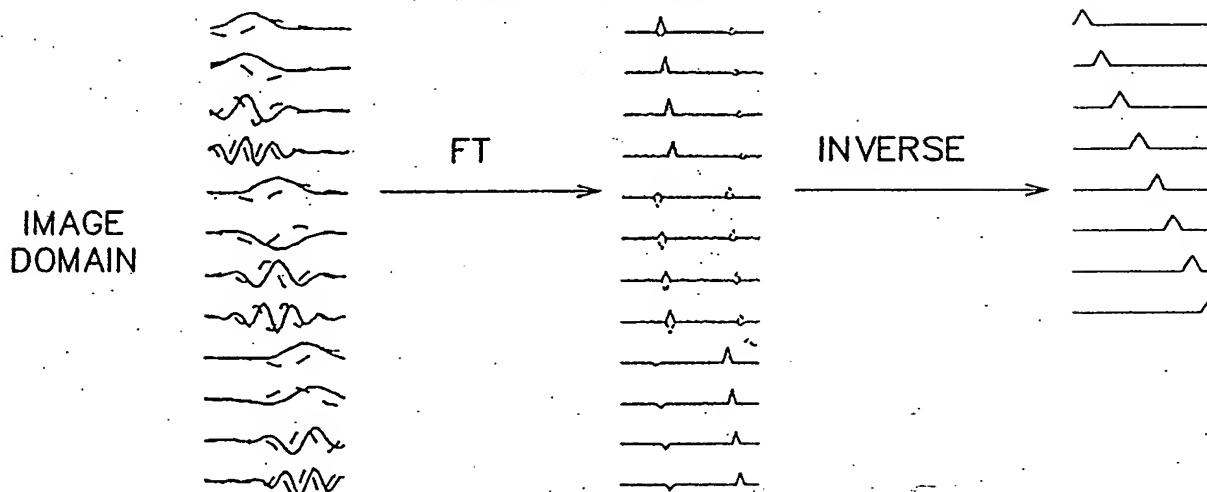


FIG. 17b

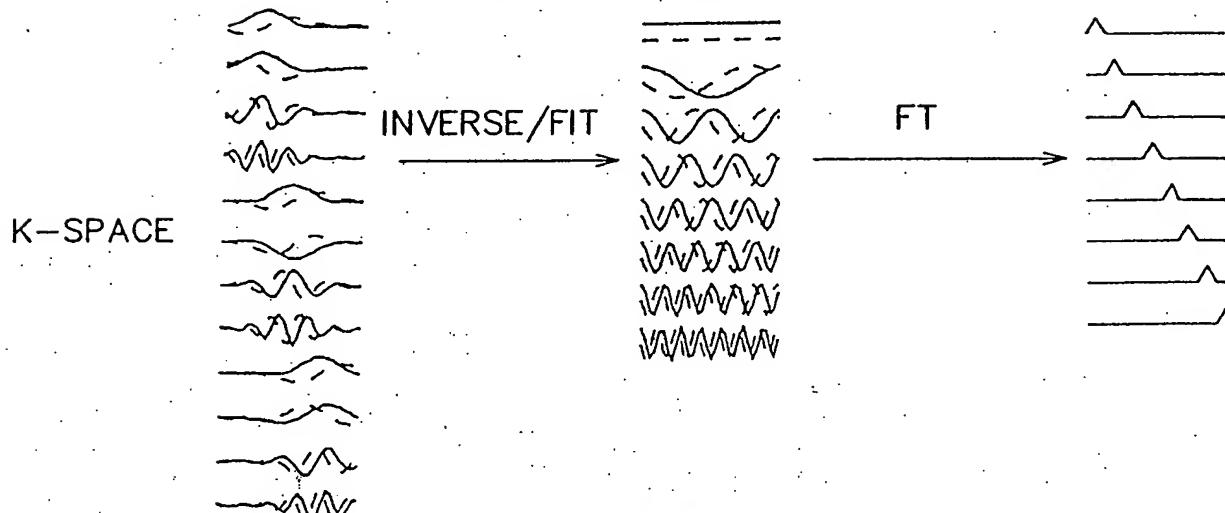


FIG. 17c

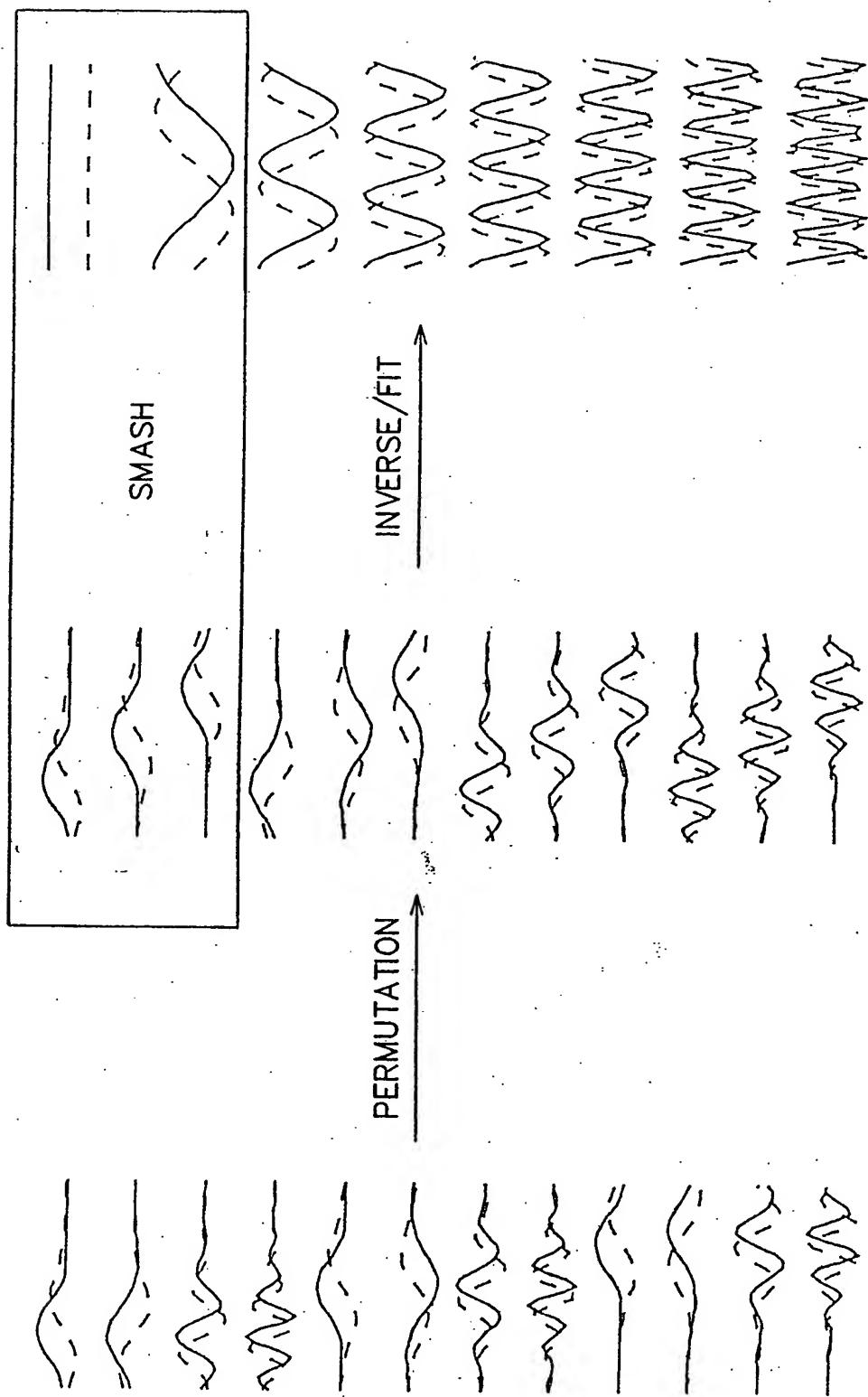


FIG. 18

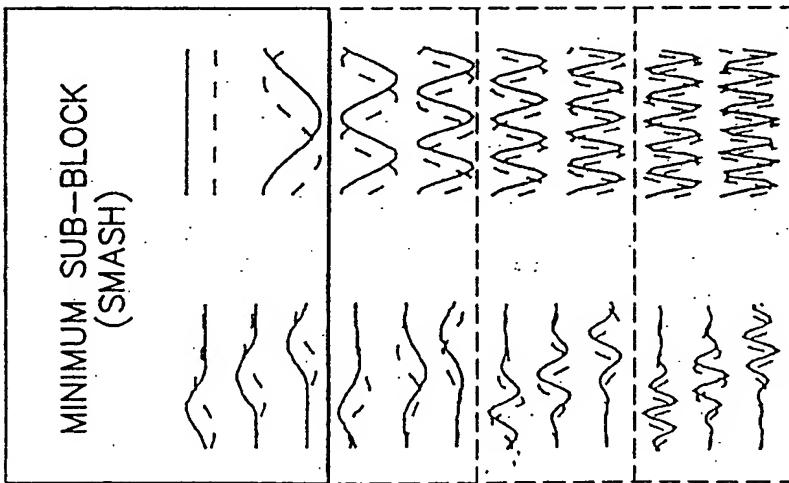
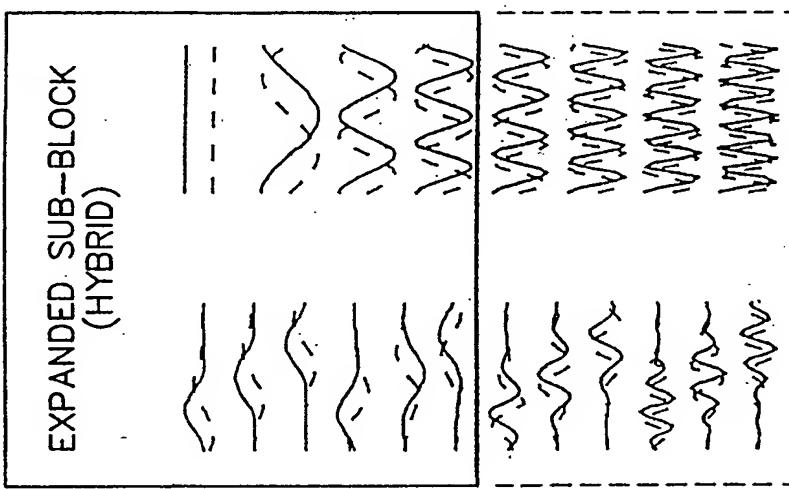
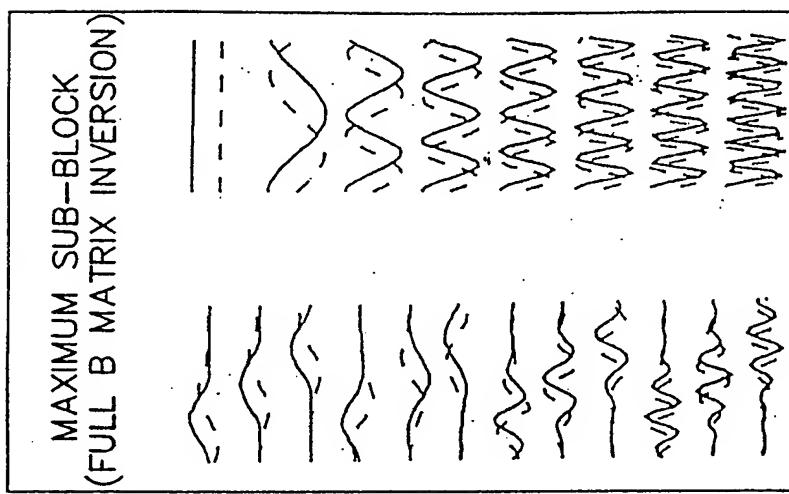


FIG. 19a

FIG. 19b

FIG. 19c

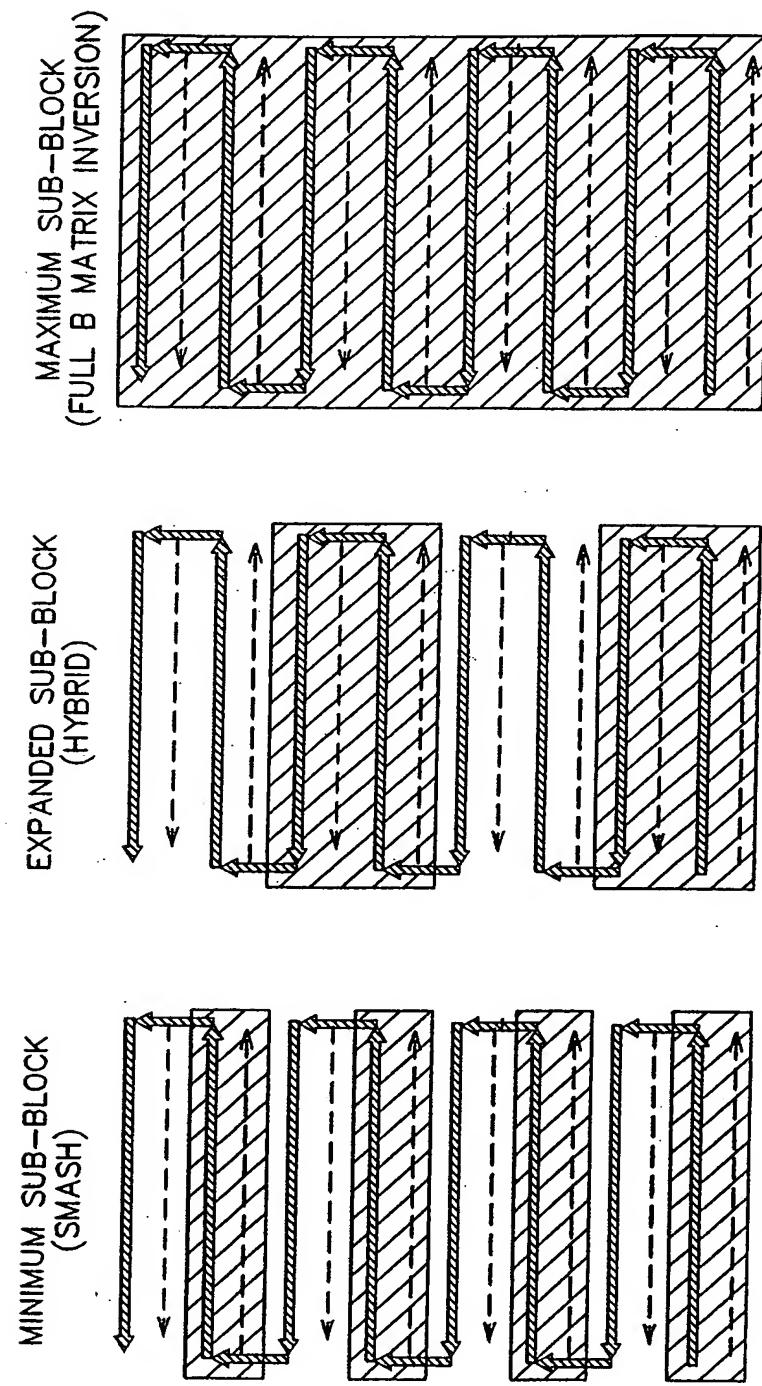


FIG. 20

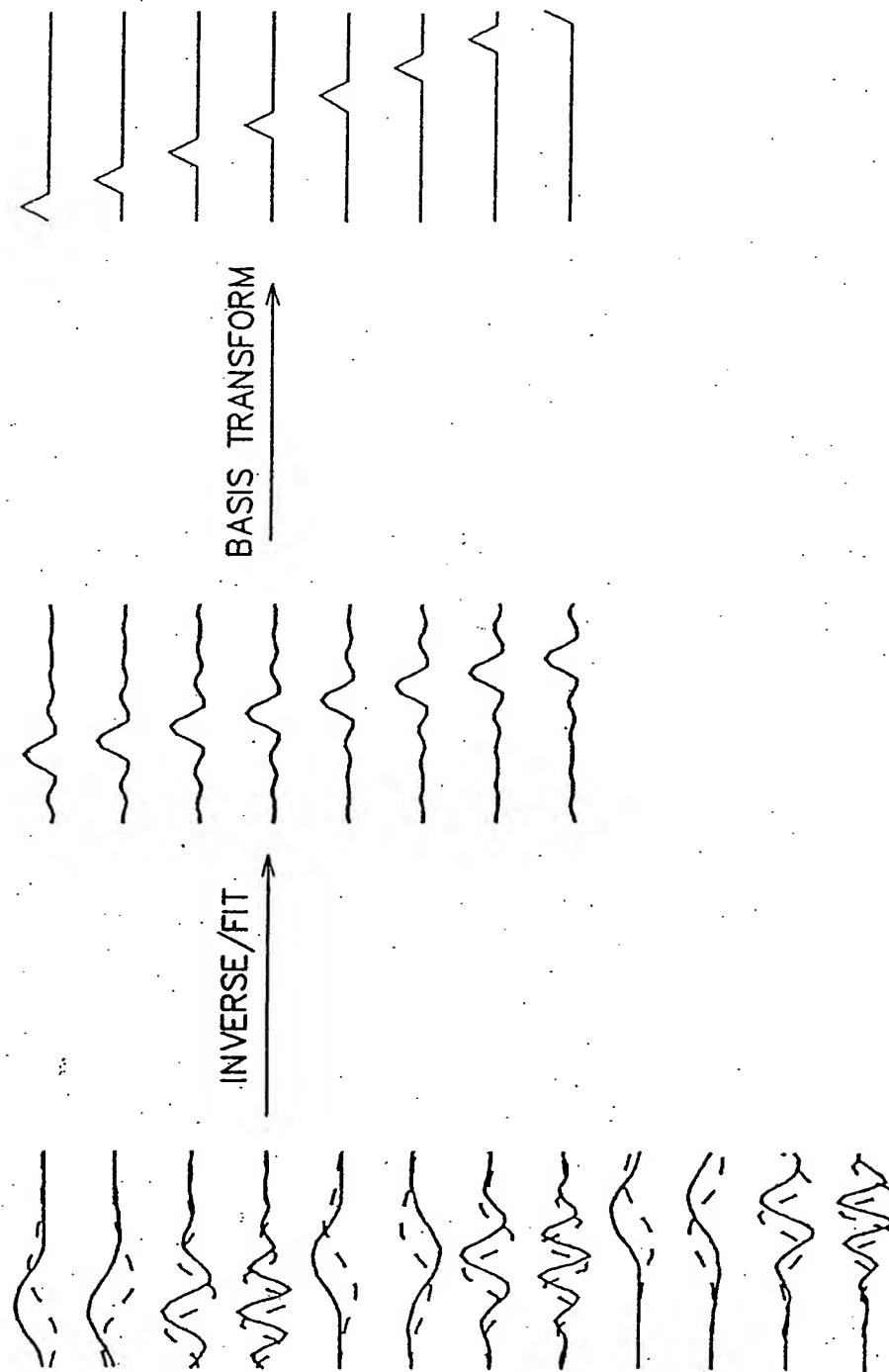


FIG. 21

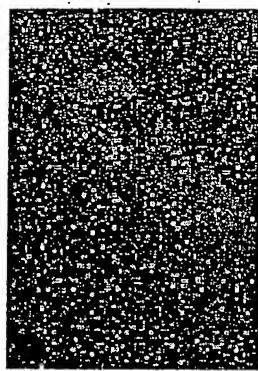


FIG. 22c



FIG. 22b



FIG. 22a



FIG. 22e



FIG. 22d

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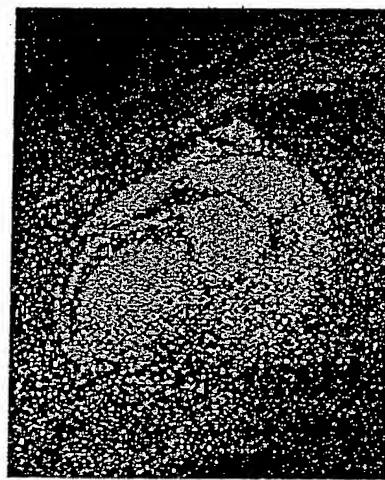


FIG. 23a

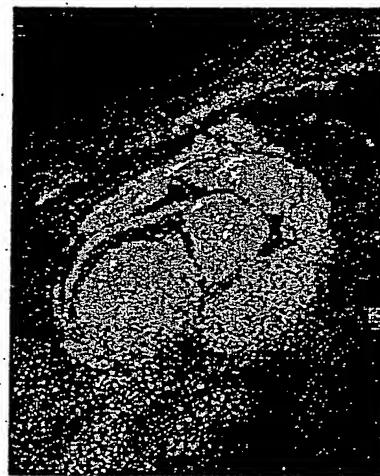


FIG. 23b

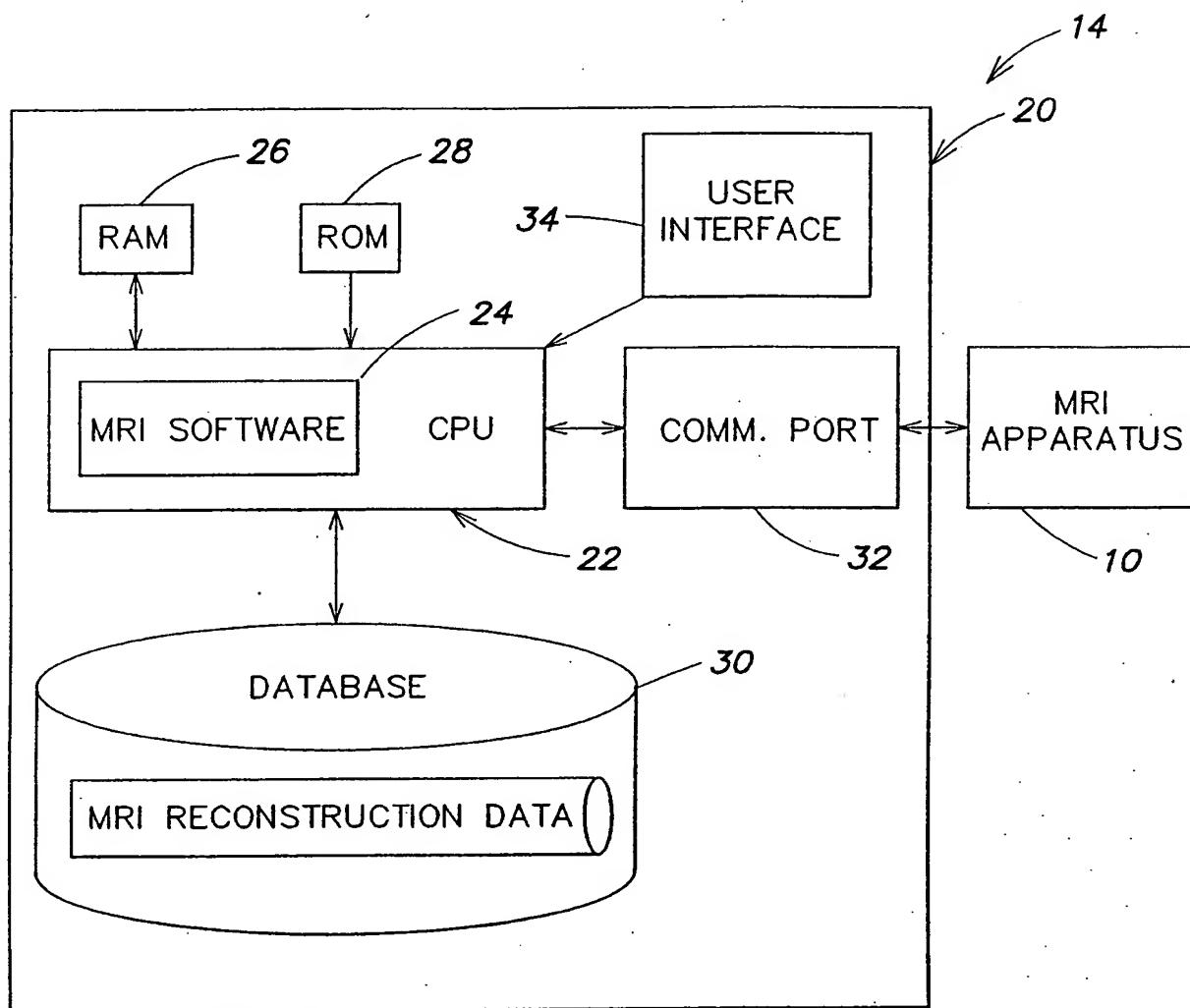


FIG. 24

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